

## DOCUMENT RESUME

ED 194 768

CE 027 025

AUTHOR Budke, Wesley F.; Magisos, Joel H.  
TITLE Vocational Education Program Improvement. A Summary of State-Administered Projects in FY 1978 and 1979.  
INSTITUTION Ohio State Univ., Columbus. National Center for Research in Vocational Education.  
SPONS AGENCY Bureau of Occupational and Adult Education (DHEW/OE), Washington, D.C.  
BUREAU NO 498MH90003  
PUB DATE Apr 80  
CONTRACT 300-78-0032  
NOTE 25p.  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Curriculum Development; Demonstration Programs; \*Educational Improvement; Educational Innovation; \*Federal Aid; Federal Legislation; \*Improvement Programs; Research Projects; \*State Programs; Statistical Data; \*Vocational Education  
IDENTIFIERS Education Amendments 1976

## ABSTRACT

This booklet summarizes the 1,560 vocational education program improvement projects conducted during FY 1978-1979 under the Education Amendments of 1976 (P.L. 94-482) with respect to location, funding levels, funding recipients, educational levels, problem areas, and outcomes. Projects reported include research, innovative and exemplary programs, and curriculum development activities. Data contained in six tables provide information on (1) state program improvement projects by state; (2) state program improvement projects by legislative section; (3) recipients of project funding; (4) target educational levels; (5) problem areas addressed by projects; and (6) products and outcomes of projects. Appended is a table of number and funding amounts of projects by state and legislative section. The data for this report were compiled from descriptive abstracts provided by state research coordinating units and contained in the EPIC database. (KC)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED194768

VOCATIONAL EDUCATION PROGRAM IMPROVEMENT

A Summary of State-Administered Projects in FY 1978 and 1979

Prepared by  
Wesley E. Budke and Joel H. Magisos

The National Center for Research in Vocational Education  
The Ohio State University  
1960 Kenny Road  
Columbus, Ohio 43210

April 1980

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

CE 027 025

### THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation and progression. The National Center fulfills its mission by:

- o Generating knowledge through research
- o Developing educational programs and products
- o Evaluating individual program needs and outcomes
- o Providing information for national planning and policy
- o Installing educational programs and products
- o Operating information systems and services
- o Conducting leadership development and training programs

## FUNDING INFORMATION

**Project Title:** National Center for Research in Vocational Education, Clearinghouse Function

**Contract Number:** OEC-300-78-0032

**Project Number:** 49EMH90003

**Educational Act under Which Funds Were Administered:** Education Amendments of 1976, Public Law 94-482

**Source of Contract:** Department of Health, Education, and Welfare  
U.S. Office of Education  
Bureau of Occupational and Adult Education  
Washington, DC 20202

**Project Officer:** Paul Manchak

**Contractor:** The National Center for Research in Vocational Education  
The Ohio State University  
Columbus, Ohio 43210

**Executive Director:** Robert E. Taylor

**Clearinghouse Director:** Wesley E. Budke

**Disclaimer:** This publication was prepared pursuant to a contract with the Bureau of Occupational and Adult Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Office of Education position or policy.

**Discrimination Prohibited:** Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972 states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Therefore, the National Center for Research in Vocational Education, like every program or activity receiving financial assistance from the U.S. Department of Health, Education, and Welfare, must be operated in compliance with these laws.

## FOREWORD

Provisions were made in the Education Amendments of 1976 (P.L. 94-482) for state-administered program improvement projects. During the 1978 and 1979 fiscal years, 1,560 research, innovative and exemplary, and curriculum development projects were conducted under this legislative provision. Information about these projects have been reported with respect to location, funding levels, funding recipients, educational levels, problem areas, and outcomes. This summary report will be helpful to legislators, federal program administrators, and state agency personnel by providing answers to questions such as:

- o How many projects were conducted and how much money was obligated?
- o How do states compare in the number and kind of projects conducted and the amount of funds obligated?
- o Are projects addressing critical problems and issues?
- o What is the relative emphasis on target audiences and problem areas?
- o What kinds of agencies and organizations are conducting the work?

We are pleased to disseminate this summary of state program improvement projects so that it might be used for program planning and policy development.

We wish to thank the staff members of the state research coordinating units for this cooperation in submitting project descriptions. Ronald D. McCage, Manager, Research and Development Section, Illinois State Department of Adult, Vocational and Technical Education, Springfield, Illinois; Erma Keyes, Director, Vocational Education Information Network (VEIN), Millersville State College, Millersville, Pennsylvania; and Donald K. Erickson, Director, ERIC Clearinghouse for Handicapped and Gifted Children, Reston, Virginia served on the National Center Clearinghouse panel.

Recognition is given to Joel H. Magisos, Associate Director for Information Systems; Wesley E. Budke, Clearinghouse Director; Ida Halasz-Salster, Research Specialist; and Carl F. Oldsen, Research Specialist, for their part in assembling the information and preparing this publication. Appreciation also is expressed to Carroll Curtis, Pennsylvania RCU Director, and Fred Haddad, Consultant, Connecticut State Department of Education, for their critical review of the manuscript prior to its final revision and publication.

Robert E. Taylor  
Executive Director  
The National Center for  
Research in Vocational Education

## INTRODUCTION

The Vocational Education Act of 1963 (P.L. 88-210) was the landmark legislation for vocational education program improvement because it contained broad provisions for research, training, experimental, and demonstration or pilot programs. Funding authorized under the legislation was appropriated by Congress and allocated by the Commissioner for institutional capacity building and for such priorities as program evaluation, resource development, vocational guidance and career choice, organization and administration, and new careers. The subsequent Vocational Education Act of 1968 (P.L. 90-576) authorized support of grants for research, training, exemplary programs, and curriculum development. Part of the research and exemplary programs was to be administered at the state level.

An assessment by the Committee for Vocational Education Research and Development (COVERD, 1976) was highly critical of the vocational education research and development program because of its apparent lack of impact due to shifting research priorities, geographic restriction on distribution of R&D funds, lack of coordination between parts, inadequate dissemination and utilization, failure to examine impact, and slow startup. COVERD faulted vocational education R&D for not focusing on the larger philosophical and policy issues during the previous 10-year period. Other studies by Rand and Development Associates raised concerns about other aspects of the R&D program.

The Education Amendments of 1976 (P.L. 94-482) responded to many of the concerns raised about vocational R&D. It provided for Programs of National Significance to be administered at the federal level and for Program Improvement and Support Services to be administered at the state level. The act encouraged consolidation of programs, better management, and accountability. The Rules and Regulations for the act required the state research coordinating units to submit abstracts of contracted program improvement projects to The National Center for Research in Vocational Education and to submit reports and products resulting from the projects within 90 days of completion of the project. The National Center, through its Clearinghouse, publishes abstracts of program improvement projects in Resources in Vocational Education bimonthly and in Current Projects in Vocational Education annually, as well as maintains the information in its files for review and analysis.

This database of state program improvement project descriptions can be helpful to practitioners, researchers, administrators, and policy makers. Analysis of information in the database can provide answers to many program development and policy-making questions.

The first analysis of this database is reported here. It provides summary data about projects conducted in the states and their focus. It provides information about where projects were conducted, by whom, for what purpose, and with what results. This report does not deal with qualitative and programmatic dimensions of state program improvement projects, nor with impact. These dimensions need further investigation which can be facilitated by the database.

## METHODOLOGY

The database of state-administered program improvement projects has been compiled from descriptive abstracts provided by state research coordinating units. The abstracts served as the data source for the review and analysis conducted by the Clearinghouse staff. The basic steps taken by the staff are described below:

1. Abstracts were reviewed by Clearinghouse staff to make sure that all bibliographic and funding information was complete. If some information was missing, states were asked to supply it.
2. Lists of projects were compiled and sent to research coordinating unit directors for verification.
3. Key variables were edited and indexed in the ERIC format.
4. Key variables were coded for computer analysis (i.e., state, fiscal year, legislative section number, project beginning and ending dates, amount of funding, recipient institution, legislative and federal priorities addressed, educational level, target population, vocational service area, and products or outcomes).
5. Data were sorted and tabulated using the Statistical Package for the Social Sciences (SPSS).
6. Data were aggregated for display in the six tables in the Findings section.
7. Data in the tables were described and analyzed for conclusions, implications, and recommendations.

The methodology used can be replicated in subsequent years as more data become available.

## FINDINGS

The findings reported in this section are based upon data drawn from program improvement project abstracts supplied by state research coordinating units. It is believed that the data is relatively complete (i.e., in excess of 90 percent) because lists of these project abstracts were verified as complete by research coordinating units who administer the program improvement activities. The data listed below were chosen for attention in this report:

1. State program improvement projects by state in Table I.
2. State program improvement projects by legislative section in Table II.
3. Recipients of project funding in Table III.
4. Target educational levels in Table IV.
5. Problem areas addressed by projects in Table V.
6. Products and outcomes of projects in Table VI.

The number and funding amounts of projects are displayed by state and legislative section in Appendix A.

Table I shows the number of vocational education program improvement projects and Federal funds obligated for projects in each of the states and territories under provisions of Sections 131, 132, and 133 of P.L. 94-482 during FY 1978 and 1979.

1. For the two year period, states and territories reported 1,560 program improvement projects for which \$39,205,436 was obligated.
2. The number of program improvement projects ranged from two in New Hampshire to 134 in Illinois; however, only one territory reported a project.
3. Obligations for program improvement during the two years ranged from \$20,125 in New Hampshire to \$4,946,973 in Texas.
4. The average funding for projects was \$25,132, with a range of \$4,882 in North Dakota to \$78,818 in the District of Columbia.
5. Funding level for individual projects ranged from \$366 to \$649,960.

TABLE I  
FY 1978 and FY 1979 STATE PROGRAM IMPROVEMENT PROJECTS  
BY STATE

| State or Territory   | Number of Projects | Obligated Funds |
|----------------------|--------------------|-----------------|
| Alabama              | 10                 | 138,701         |
| Alaska               | 10                 | 83,714          |
| Arizona              | 31                 | 376,176         |
| Arkansas             | 19                 | 460,196         |
| California           | 54                 | 2,767,715       |
| Colorado             | 14                 | 292,183         |
| Connecticut          | 26                 | 279,196         |
| Delaware             | 5                  | 61,977          |
| District of Columbia | 4                  | 315,273         |
| Florida              | 50                 | 1,911,998       |
| Georgia              | 12                 | 628,278         |
| Hawaii               | 6                  | 41,910          |
| Idaho                | 22                 | 207,244         |
| Illinois             | 134                | 4,250,485       |
| Indiana              | 47                 | 1,543,262       |
| Iowa                 | 47                 | 842,121         |
| Kansas               | 31                 | 317,366         |
| Kentucky             | 21                 | 430,491         |
| Louisiana            | 14                 | 318,032         |
| Maine                | 3                  | 48,374          |
| Maryland             | 65                 | 787,463         |
| Massachusetts        | 14                 | 961,228         |
| Michigan             | 11                 | 865,250         |
| Minnesota            | 36                 | 824,005         |
| Mississippi          | 10                 | 622,475         |
| Missouri             | 20                 | 155,327         |
| Montana              | 16                 | 195,701         |
| Nebraska             | 4                  | 54,621          |
| Nevada               | 8                  | 112,998         |
| New Hampshire        | 2                  | 20,126          |
| New Jersey           | 47                 | 827,387         |
| New Mexico           | 14                 | 518,660         |
| New York             | 91                 | 3,069,511       |
| North Carolina       | 7                  | 198,526         |
| North Dakota         | 29                 | 141,573         |

TABLE I. continued

| State or Territory | Number of Projects | Obligated Funds |
|--------------------|--------------------|-----------------|
| Ohio               | 79                 | 2,502,339       |
| Oklahoma           | 8                  | 75,055          |
| Oregon             | 37                 | 427,573         |
| Pennsylvania       | 123                | 2,007,993       |
| Rhode Island       | 9                  | 62,966          |
| South Carolina     | 3                  | 66,295          |
| South Dakota       | 4                  | 253,000         |
| Tennessee          | 29                 | 717,333         |
| Texas              | 95                 | 4,946,973       |
| Utah               | 4                  | 62,896          |
| Vermont            | 12                 | 104,068         |
| Virginia           | 54                 | 1,389,483       |
| Washington         | 31                 | 222,533         |
| West Virginia      | 52                 | 588,619         |
| Wisconsin          | 59                 | 847,099         |
| Wyoming            | 26                 | 167,210         |
| Puerto Rico        | 1                  | 94,528          |
| TOTALS             | 1,560              | 39,205,436      |

Table II shows the distribution of projects and funds obligated across the program improvement sections (i.e., research, innovative and exemplary, and curriculum development).

1. Overall program improvement funding was divided among sections approximately equally; however, several states chose to fund projects under only one or two of the three sections (Appendix A).
2. The 516 projects conducted under Section 131 (research) were funded at an average of \$25,507.
3. The 577 projects conducted under Section 132 (innovative and exemplary) were funded at an average of \$23,558.
4. The 467 projects conducted under Section 133 (curriculum development) were funded at an average of \$26,661.

5. The average funding for state projects within each of the sections (Appendix A) was extremely variable --
- research projects ranged from \$481 to \$65,978
  - innovative and exemplary projects ranged from \$3,011 to \$171,691
  - curriculum development projects ranged from \$685 to \$335,662

TABLE II  
FY 1978-1979 STATE PROGRAM IMPROVEMENT PROJECTS  
BY LEGISLATIVE SECTION

| Legislative Section<br>under Subpart 3<br>PL 94-482 | Number of<br>Projects | Obligated<br>Funds |
|-----------------------------------------------------|-----------------------|--------------------|
| Section 131, Research                               | 516                   | 13,161,524         |
| Section 132, Innovative<br>and Exemplary            | 577                   | 13,593,187         |
| Section 133, Curriculum<br>Development              | 467                   | 12,450,725         |
| TOTAL                                               | 1,560                 | 39,205,435         |

Table III shows the recipients of project funding in several categories. All funding amounts by category are rounded. Percentages shown are for the amount of funds, not for projects.

1. Over 86 percent of the funding was for projects conducted by educational agencies.
2. Four-year colleges and universities conducted 33.5 percent of the projects, followed by local educational agencies (28.6 percent), two-year colleges (13.4 percent) and state education agencies (6.1 percent).
3. Non-educational agencies (i.e., research centers, private businesses, and professional associations) conducted projects which were supported with 8.6 percent of the funds.
4. Intermediate education agencies conducted 32 projects which were funded at an average of \$60,281, which was over twice as large as the average size project overall.

Table III  
RECIPIENTS OF PROJECT FUNDING

| Institution<br>or Agency                                               | Number of<br>Projects | Obligated<br>Funds | Percent of<br>Funding |
|------------------------------------------------------------------------|-----------------------|--------------------|-----------------------|
| 4-Year College/University                                              | 440                   | 13,151,000         | 33.5                  |
| Local Education Agency                                                 | 477                   | 11,203,000         | 28.6                  |
| 2-Year College (Jr. College/<br>Technical School/Community<br>College) | 287                   | 5,248,000          | 13.4                  |
| State Education Agency                                                 | 92                    | 2,406,000          | 6.1                   |
| Research Center                                                        | 57                    | 2,206,000          | 5.6                   |
| Intermediate Education Agency                                          | 32                    | 1,929,000          | 4.9                   |
| None/Information Not Available                                         | 61                    | 1,612,000          | 4.1                   |
| Private Business                                                       | 36                    | 844,000            | 2.2                   |
| Professional Association                                               | 10                    | 314,000            | .8                    |
| Other                                                                  | 18                    | 291,000            | .7                    |
| TOTALS                                                                 | 1,560                 | 39,204,000*        | 100.0                 |

\*Actual total is \$39,205,436.00; difference due to rounding.

Table IV provides information on the number of projects and funding directed toward target educational levels or combinations of educational levels.

1. The focus of 44.1 percent of the program improvement projects was upon secondary and postsecondary or postsecondary and adult educational levels.
2. The focus of 38.9 percent of the work was upon less-than-postsecondary education levels (i.e., elementary, elementary and secondary, and secondary).
3. Focus on educational levels was not applicable in 201 (16.9 percent) of the projects.

TABLE IV  
TARGET EDUCATION LEVELS

| Educational Level                   | Number of Projects | Obligated Funds | Percent of Funding |
|-------------------------------------|--------------------|-----------------|--------------------|
| Secondary (7-12)                    | 485                | 10,268,000      | 26.2               |
| Postsecondary and Adult (13-Adult)  | 461                | 10,047,000      | 25.6               |
| Secondary and Postsecondary (10-14) | 260                | 7,245,000       | 18.5               |
| Not Applicable                      | 201                | 6,642,000       | 16.9               |
| Elementary and Secondary (K-12)     | 131                | 4,428,000       | 11.3               |
| Elementary (K-6)                    | 21                 | 576,000         | 1.4                |
| TOTALS                              | 1,560              | 39,206,000*     | 100.0              |

\*Actual total is \$39,205,436.00; difference due to rounding.

Table V shows the problem areas addressed by the state-administered vocational education program improvement projects funded during FY 1978 and 1979. The "Not Applicable" category is quite large because products such as technical reports and monographs, management and policy information, and consortiums and networks were not directed at such levels.

1. Over 80 percent of the projects addressed problems relevant to federal administrative and legislative priorities.
2. The largest percentage (32.4 percent) was in the area of curriculum (i.e., management, development).
3. A large percentage (16.2 percent) of projects was related to special needs populations (i.e., handicapped, gifted, disadvantaged).
4. Planning, data, and accountability projects accounted for 10.1 percent of the funding.

TABLE V  
PROBLEM AREAS ADDRESSED BY PROJECTS

| Problem Area                                                | Number of Projects | Obligated Funds | Percent of Funding |
|-------------------------------------------------------------|--------------------|-----------------|--------------------|
| Curriculum Management/Curriculum Development Procedures     | 487                | 12,687,000      | 32.4               |
| None/Information Not Available                              | 302                | 7,156,000       | 18.2               |
| Special Needs (Handicapped, Gifted, Disadvantaged)          | 227                | 6,353,000       | 16.2               |
| Planning, Data & Accountability                             | 150                | 4,005,000       | 10.1               |
| Guidance for Careers/Vocations                              | 98                 | 2,379,000       | 6.1                |
| Education to Work Transition                                | 57                 | 1,387,000       | 3.5                |
| Equity/Civil Rights                                         | 60                 | 1,358,000       | 3.5                |
| Other Federal Priority                                      | 63                 | 1,370,000       | 3.5                |
| Administration of State/Local Vocational Education Agencies | 33                 | 897,000         | 2.3                |
| Basic Skills                                                | 24                 | 642,000         | 1.6                |
| Availability/Accessibility to Adults                        | 32                 | 517,000         | 1.3                |
| Urban/Rural/Youth                                           | 27                 | 453,000         | 1.2                |
| TOTALS                                                      | 1,560              | 39,204,000*     | 100.0              |

\*Actual total is \$39,205,436.00; difference due to rounding.

Table VI shows the nature of products and outcomes of the 1,560 vocational education program improvement projects administered by the states in FY 1978 and 1979.

1. Curriculum and instructional products resulted from 534 or 36.4 percent of the projects.
2. Personnel training was the outcome of 247 or 14.3 percent of the projects.
3. Evaluation and assessment was the outcome or product of 314 projects (12.8 percent).

4. These three categories of products and outcomes promise to impact directly on programs and constitute 63.5 percent of the state-administered program improvement investment.

TABLE VI  
PRODUCTS AND OUTCOMES OF PROJECTS

| Primary Product/Outcome                | Number of Projects | Obligated Funds | Percent of Funding |
|----------------------------------------|--------------------|-----------------|--------------------|
| Curriculum and Instructional Products  | 534                | 14,281,000      | 36.4               |
| Personnel Training (Inservice)         | 247                | 5,671,000       | 14.3               |
| Evaluation and Assessment              | 214                | 5,024,000       | 12.8               |
| Technical Reports and Monographs       | 191                | 4,662,000       | 11.9               |
| Program Models and Feasibility Studies | 176                | 3,878,000       | 9.9                |
| Management and Policy Information      | 80                 | 2,515,000       | 6.4                |
| Information Not Available              | 35                 | 1,133,000       | 2.9                |
| Personnel Counseling                   | 38                 | 748,000         | 1.9                |
| Other                                  | 1                  | 495,000         | 1.3                |
| Consortiums and Networks               | 19                 | 419,000         | 1.1                |
| Placement                              | 18                 | 435,000         | 1.1                |
| TOTALS                                 | 1,560              | 39,207,000*     | 100.0              |

\*Actual total is \$39,205,436.00; difference due to rounding.

## CONCLUSIONS

Several conclusions about the state program improvement effort can be drawn from the information collected and organized by the Clearinghouse for FY 1978 and FY 1979.

1. The reporting system is working. Information is flowing from the state research coordinating units to the National Center Clearinghouse on a regular basis. States have assured the Clearinghouse staff that all projects under Sections 131, 132 and 133 have been reported.
2. More funds are being obligated for support services than for program improvement. State program improvement projects funded under Sections 131, 132 and 133 represent \$39,205,436 or 17.5 percent of the total amount allocated to the states for program improvement and support services. It is surmised that the remaining 82.5 percent is being obligated for the support services specified in Sections 134, 135 and 136, and possibly for the administration of the state research coordinating units when this is not reported as a project. States vary in the proportion of funds they devoted to program improvement.
3. Collectively, the states are obligating about equal amounts on research, innovative and exemplary, and curriculum development products. Individual states, however, are extremely variable in this respect, some choosing to fund no projects in certain categories.
4. The amount obligated for each project is extremely variable. There is a wide range in project size within and between states. The average funding per project is \$25,131. The range is from \$366 to \$649,960.
5. States are being responsive to federal priorities. Over 80 percent of the state program improvement projects were conducted in problem areas related to federal administrative and legislative priorities.
6. State program improvement projects have focused on every educational level. Over 44 percent of the state program improvement obligations have been at postsecondary, adult and combined secondary-postsecondary levels. Other projects have focused on levels from kindergarten to grade 12.
7. State program improvement projects are being conducted by educational agencies and institutions at every level. Only 13.4 percent of the state program improvement funds go to projects done by other than educational agencies. The largest share of the work is being done by four-year colleges and universities (33.5 percent), local educational agencies (28.6 percent), and two-year colleges (13.4 percent.)
8. The greatest number of projects have focused directly on improvement of instruction (i.e., curriculum and instruction projects, 534; personnel training, 247; and evaluation and assessment, 214).

Quality, redundancy, and programmatic aspects of state program improvement projects have not yet been examined. Also, there is need to examine how states are setting program improvement priorities, incorporating these into comprehensive state plans, and following through with appropriate sequences of research, curriculum development, demonstration, personnel development, and statewide implementation.

## IMPLICATIONS AND RECOMMENDATIONS

The implications which can be drawn from the conclusions have bearing on R&D policy development at federal and state levels, on decision making related to R&D operations at both levels, and on practices at every level. The recommendations which spring from the implications suggest new or adjusted policies, procedures, and practices.

### Implications

1. The reporting system, while working could be more efficient and effective. Not all projects nor all data elements for projects have been reported. Further, it has taken repeated urging before some states responded with submission of project abstracts.
2. Little is known about support services and administrative activities funded under P.L. 94-482. Currently, states are not required to submit information about guidance, personnel development, or sex equity activities funded under Sections 134, 135, and 136. This represents approximately 82.5 percent of all discretionary program improvement and support service activities in the states.
3. States report program improvement activities in three categories (i.e., research, innovative and exemplary, and curriculum development), but there is little difference in the design of some of the projects assigned to different categories. Examination of project abstracts reveals that there is an uncertain mix of activities funded under each of the categories. State personnel may regard integrity of the categories as unimportant or may be funding the proposals received in each category regardless of methodology because there are no other options.
4. States have different strategies for program improvement as manifested in different funding patterns and levels. The size of projects and the proportion of projects in each category vary considerably by state. It is apparent that many states have encouraged different patterns and levels.
5. Independent funding decisions by states about projects on nationally significant problems may be increasing the chance of viable solutions through diversity; on the other hand, these independent decisions may be decreasing the chance of programmatic approaches and increasing unplanned duplication.

### Recommendations

1. The responsibility of state research coordinating units to supply information about program improvement projects should be further clarified and reinforced. The legislation and administrative regulations regarding submittal of project information should be explicit. Responsibility for enforcement of these regulations should be assumed by the Federal agency through information, training, and sanctions (if necessary).
2. Training should be provided to research coordinating unit personnel to improve their ability to organize, prepare and submit accurate project information.
3. The project information (i.e., tracking) system should be expanded to accommodate information about support service and administrative activities in the states. At the present only 17.5 percent of the program improvement and support service activity is reported.
4. A study of the results (i.e., project outcomes and products) of various funding patterns and levels would be useful. While some states undoubtedly seek specific outcomes via certain patterns and levels, others may be less rational.
5. The planning of multi-state, multi-year cooperative R&D effort on nationally significant problems should be encouraged. The initial planning undertaken in late 1979 exemplifies this recommendation.

## BIBLIOGRAPHY

An Evaluation of Vocational Exemplary Projects: Part D Vocational Education Act Amendments of 1968. Washington, D.C.: Development Associates, Inc., March 1975. ED 109 475

Assessing Vocational Education Research and Development. Committee for Vocational Education Research and Development (COVERD). Washington, D.C.: National Academy of Sciences, 1976. ED 128 654

Gordon, Ruth, Comp. Research and Development Projects in Vocational Education, FY 1970 - 1977. An Annotated Bibliography. Volume I. Federally Administered Projects. Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, January 1979. ED 170 532.

Gordon, Ruth; Clapp, Wayne; and Budke, Wesley, Comp. Research and Development Projects in Vocational Education, FY 1970 - 1977. An Annotated Bibliography. Volume II. State Administered Projects. Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, January 1980. ED 182 499

Magisos, Joel H., and Moore, Allen B. Evaluation of Vocational Education R&D Programs. An Integrative Analysis of Recent Studies. Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, 1977. ED 142 793

Report to the Congress: What is the Role of Federal Assistance for Vocational Education? GAO Report. Washington, D.C.: Comptroller General of the United States, December 31, 1974. ED 105 132

APPENDIX A

FY 1978 - 1979 State Administered  
Program Improvement Projects

FY 1978-1979 STATE ADMINISTERED PROGRAM IMPROVEMENT PROJECTS

| STATE                | Sec. 131<br>(Research) |           | Sec. 132<br>(Exemplary) |           | Sec. 133<br>(Curriculum) |         | TOTALS             |           |
|----------------------|------------------------|-----------|-------------------------|-----------|--------------------------|---------|--------------------|-----------|
|                      | No. of<br>Projects     | Amount    | No. of<br>Projects      | Amount    | No. of<br>Projects       | Amount  | No. of<br>Projects | Amount    |
| Alabama              | -                      | -         | 9                       | 88,701    | 1                        | 50,000  | 10                 | 138,701   |
| Alaska               | 2                      | 21,691    | 1                       | 5,321     | 7                        | 56,702  | 10                 | 83,714    |
| Arizona              | 11                     | 103,510   | 7                       | 132,602   | 13                       | 140,064 | 31                 | 376,176   |
| Arkansas             | 9                      | 181,891   | 10                      | 278,305   | -                        | -       | 19                 | 460,196   |
| California           | 20                     | 1,319,567 | 12                      | 558,354   | 22                       | 889,794 | 54                 | 2,767,715 |
| Colorado             | 10                     | 182,760   | 2                       | 24,423    | 2                        | 85,000  | 14                 | 292,183   |
| Connecticut          | 18                     | 113,061   | 7                       | 125,976   | 1                        | 40,159  | 26                 | 279,196   |
| Delaware             | -                      | -         | 3                       | 22,697    | 2                        | 39,280  | 5                  | 61,977    |
| District of Columbia | 4                      | 315,273   | -                       | -         | -                        | -       | 4                  | 315,273   |
| Florida              | 27                     | 1,086,694 | 11                      | 149,261   | 12                       | 676,043 | 50                 | 1,911,998 |
| Georgia              | 8                      | 465,322   | -                       | -         | 4                        | 162,956 | 12                 | 628,278   |
| Hawaii               | -                      | -         | 3                       | 25,410    | 3                        | 16,500  | 6                  | 41,910    |
| Idaho                | 7                      | 32,892    | 11                      | 148,385   | 4                        | 25,967  | 22                 | 207,244   |
| Illinois             | 51                     | 1,622,041 | 53                      | 2,011,178 | 30                       | 617,266 | 134                | 4,250,485 |
| Indiana              | 24                     | 542,978   | 20                      | 930,371   | 3                        | 69,913  | 47                 | 1,543,262 |
| Iowa                 | 15                     | 481,230   | 5                       | 82,501    | 27                       | 278,390 | 47                 | 842,121   |
| Kansas               | 13                     | 129,896   | 5                       | 83,315    | 13                       | 104,155 | 31                 | 317,366   |
| Kentucky             | 7                      | 155,881   | 14                      | 274,610   | -                        | -       | 21                 | 430,491   |
| Louisiana            | 7                      | 159,376   | 5                       | 104,952   | 2                        | 53,704  | 14                 | 318,032   |
| Maine                | -                      | -         | 2                       | 40,524    | 1                        | 7,850   | 3                  | 48,374    |
| Maryland             | 16                     | 137,038   | 28                      | 227,537   | 21                       | 422,888 | 65                 | 787,463   |
| Massachusetts        | 7                      | 253,619   | 2                       | 343,383   | 5                        | 364,226 | 14                 | 961,228   |
| Michigan             | 4                      | 137,000   | 1                       | 55,000    | 6                        | 673,250 | 11                 | 865,250   |
| Minnesota            | 17                     | 477,467   | 6                       | 111,256   | 13                       | 235,282 | 36                 | 824,005   |
| Mississippi          | 5                      | 186,720   | 4                       | 100,093   | 1                        | 335,662 | 10                 | 622,475   |

FY 1978-1979 STATE ADMINISTERED PROGRAM IMPROVEMENT PROJECTS

| STATE          | Sec. 131<br>(Research) |            | Sec. 132<br>(Exemplary) |            | Sec. 133<br>(Curriculum) |            | TOTALS             |            |
|----------------|------------------------|------------|-------------------------|------------|--------------------------|------------|--------------------|------------|
|                | No. of<br>Projects     | Amount     | No. of<br>Projects      | Amount     | No. of<br>Projects       | Amount     | No. of<br>Projects | Amount     |
| Missouri       | 18                     | 106,797    | 2                       | 48,530     | -                        | -          | 20                 | 155,327    |
| Montana        | 5                      | 25,069     | 7                       | 157,489    | 4                        | 13,143     | 16                 | 195,701    |
| Nebraska       | -                      | -          | -                       | -          | 4                        | 54,621     | 4                  | 54,621     |
| Nevada         | -                      | -          | 8                       | 112,998    | -                        | -          | 8                  | 112,998    |
| New Hampshire  | 1                      | 2,826      | -                       | -          | 1                        | 17,300     | 2                  | 20,126     |
| New Jersey     | 11                     | 178,242    | 20                      | 408,143    | 16                       | 241,002    | 47                 | 827,387    |
| New Mexico     | 6                      | 96,024     | 5                       | 329,521    | 3                        | 93,115     | 14                 | 518,660    |
| New York       | 35                     | 1,096,940  | 14                      | 425,824    | 42                       | 1,546,747  | 91                 | 3,069,511  |
| North Carolina | 5                      | 192,504    | 2                       | 6,022      | -                        | -          | 7                  | 198,526    |
| North Dakota   | 7                      | 28,617     | 12                      | 66,956     | 10                       | 46,000     | 29                 | 141,573    |
| Ohio           | -                      | -          | 79                      | 2,502,339  | -                        | -          | 79                 | 2,502,339  |
| Oklahoma       | 4                      | 18,227     | 3                       | 54,728     | 1                        | 2,100      | 8                  | 75,055     |
| Oregon         | 7                      | 51,768     | 22                      | 314,429    | 8                        | 61,376     | 37                 | 427,573    |
| Pennsylvania   | 30                     | 717,217    | 44                      | 637,442    | 49                       | 653,334    | 123                | 2,007,993  |
| Rhode Island   | 3                      | 1,444      | 4                       | 60,152     | 2                        | 1,370      | 9                  | 62,966     |
| South Carolina | 3                      | 66,295     | -                       | -          | -                        | -          | 3                  | 66,295     |
| South Dakota   | 1                      | 25,000     | 2                       | 218,000    | 1                        | 10,000     | 4                  | 253,000    |
| Tennessee      | 3                      | 82,568     | 20                      | 456,707    | 6                        | 178,058    | 29                 | 717,333    |
| Texas          | 39                     | 1,461,350  | 35                      | 1,081,003  | 21                       | 2,404,620  | 95                 | 4,946,973  |
| Utah           | 2                      | 34,000     | 2                       | 28,896     | -                        | -          | 4                  | 62,896     |
| Vermont        | 4                      | 39,730     | 6                       | 56,738     | 2                        | 7,600      | 12                 | 104,068    |
| Virginia       | 13                     | 404,176    | 3                       | 34,929     | 38                       | 950,308    | 54                 | 1,389,413  |
| Washington     | 11                     | 75,345     | 15                      | 115,756    | 5                        | 31,432     | 31                 | 222,533    |
| West Virginia  | 12                     | 186,840    | 20                      | 240,963    | 20                       | 160,816    | 52                 | 588,619    |
| Wisconsin      | 13                     | 154,638    | 6                       | 154,257    | 40                       | 538,204    | 59                 | 847,099    |
| Wyoming        | 1                      | 10,000     | 25                      | 157,210    | -                        | -          | 26                 | 167,210    |
| Puerto Rico    | -                      | -          | -                       | -          | 1                        | 94,528     | 1                  | 94,528     |
| TOTALS         | 516                    | 13,161,524 | 577                     | 13,593,187 | 467                      | 12,450,725 | 1560               | 39,205,436 |